

Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

REPORT OF NATIONAL RESEARCH
“RESEARCH AND ANALYSIS OF THE LEGAL AND FACTUAL STATUS AND PROBLEMS IN THE SPHERE OF NUTRITION OF CHILDREN AT THE AGE OF 4 TO 10 YEARS OLD IN SPAIN”

MAVI CORELL DOMÉNECH; LAURA UIXERA
FLORIDA CENTRE DE FORMACIÓ, COOP. V.
Catarroja, Valencia, Spain
MCORELL@FLORIDA-UNI.ES; LUIXERA@FLORIDA-UNI.ES

1 Introduction

- 1) National priorities concerned with nutrition, nutrition of children (in kindergartens, schools), health improvement, etc.

Spanish State is organized territorially in autonomous communities, provinces and municipalities, entities that enjoy autonomy for the management of their respective interests. Thus, Spain has three Public Administrations: General Administration of the State, Autonomic Administration and Local Administration. The Royal Decree 19/2014 refunded National Institute of the Consumption and Spanish Agency of Food Security and Nutrition in a new autonomous body called Spanish Agency of Consumption, Food Security and Nutrition and its statute is approved.

Spanish Agency of Consumption, Food Security and Nutrition is an autonomous body of those provided for in article 43.1.a) of Law 6/1997 of April 14, of organization and Functioning of the General State Administration, attached to the Ministry of Health, Social Services and Equality, through the General Secretariat of Health and Consumer Affairs, with distinct legal personality and full capacity to act. The strategic direction, evaluation and control of the results of the activity of this said organism corresponds to the General Secretary of Health and Consumption.

The **Spanish Agency of Consumption, Food Security and Nutrition** has the general objectives of exercising, in development of what is established in Article 51 of the Spanish Constitution and in the consolidated text of the General Law for the Defense of Consumers and Users and other complementary laws, the promotion and the fomentation of the rights of consumers and users, as well as in the development of Law 17/2011, of July 5 of Food Security and Nutrition, promote food security as a fundamental aspect of public health, to offer guarantees and objective information to the consumers and economic agents of the Spanish agro-food sector, and to plan, coordinate and develop strategies and actions that promote information, education and health promotion in the field of nutrition, and especially the prevention of obesity.^{1 i}

¹ In: BOLETÍN OFICIAL DEL ESTADO, Núm. 29, Lunes 3 de febrero de 2014, Sec. I. Pág. 7272

Available at: <https://www.boe.es/boe/dias/2014/02/03/>



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

Figure 1. Organization and Functions of the Spanish Ministry of Health, Social Services and Equality²



National Plan for Official Control of the Food Chain (PNCOCA)³

The National Plan for Official Control of the Food Chain (PNCOCA) is the document that describes the official control systems throughout the food chain in Spain, from primary production to points of sale to the end consumer. The Plan is complete and comprehensive and describes the official control actions of the different Spanish Public Administrations in their areas of responsibility.

It is obligatory for all European Union Member States to have a multiannual national control plan, in accordance with Article 41 of Regulation (EC) No 882/2004 of the European Parliament and of the Council, of 29 April 2004, on official controls to ensure the verification of compliance with feed and food law, animal health and animal welfare laws.

In December 2015, Spain’s third Plan, the “2016–2020 National Plan for Official Control of the Food Chain”, was approved. This provides Spain with a solid, stable but flexible framework for official

² Source: <https://www.msssi.gob.es/organizacion/ministerio/organizacion/home.htm>

³ Available at: http://www.aecosan.msssi.gob.es/en/AECOSAN/web/seguridad_alimentaria/seccion/pncoca.htm



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

controls on food and feed. It also acts as a reference for Public Administrations, food business operators and consumers regarding their obligations and guarantees.

Responsibility for official control of the food chain in Spain is at the level of central government, with the Ministry of Agriculture, Food and the Environment (MAGRAMA) and the Ministry of Health, Social Services and Equality (MSSSI), whose role primarily consists in coordination. With the exception of border controls, responsibility for the planning and execution of official controls lies with the Autonomous Communities.

Due to the division of these powers in Spain, the National Plan contains a section which is common to all competent authorities, describing the high-level objectives, the competent authorities involved in their execution and the common legal basis for this. This is followed by a section which independently details the official controls in each area, as follows:

1. Official control in the area of primary production and food quality (MAGRAMA).
2. Official control in the phases subsequent to primary production in the area of the MSSSI:
 1. System for the control of food establishments and foods produced or sold on the intra-Community market with repercussions on food safety.
 2. System for the control of goods for human use or consumption from third countries.
 3. System for the control of foods made available to consumers with no repercussions on food safety.

CODE OF CO-REGULATION OF ADVERTISING FOR FOOD PRODUCTS AND BEVERAGES DIRECTED TO CHILDREN, PREVENTION OF OBESITY AND HEALTH (PAOS CODE)⁴

“The present Code, which falls within the framework of the NAOS Strategy launched in 2005 by the Spanish Ministry of Health and Consumption, aims at “reducing the prevalence of obesity and overweight and their consequences, in as much in the area of public health as in their social repercussions”. This goal is shared with the World Health Organization and the EU institutions.

(...)

Seven years after having entered into effect, the Code has proven to be a useful tool in order to improve the quality of advertising directed to children under 12 years of age, and its impact has been evaluated

⁴ Available at:

http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/Nuevo_Codigo_PAOS_2012_ingles.pdf



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

through independent research. For this reason, a series of business sector associations and other entities committed with the objectives of the PAOS agreement have adhered to it.

(...)

Within the Spanish legal system, there are a good number of laws that include references to self-regulation of advertising. Due to its importance it should be highlighted the Law 3/1991, of January 10, on Unfair Competition, which, after being modified by the Law 29/2009, recognizes and expressly fosters the self-regulatory systems and, in particular, its characteristic elements (codes of conduct and extrajudicial systems to resolve controversial issues), establishing the requirements that such self-regulatory systems must fulfil to acquire legal recognition.

Furthermore, the EU White Paper (“A Strategy for Europe on Nutrition, Overweight and Obesity Related Health Issues”), of 30 May 2007, recognizes self-regulation initiatives on advertising of food products directed to children and defends that a good self-regulation depends on the existence of systems that allow monitoring the adhesion to the agreed codes.

(...)

In this sense, the PAOS Code has meant an advance in the regulation of food advertising directed to children, not only because it establishes the principles that have to rule the design, execution and broadcasting of advertising messages, but also because it establishes the mechanisms that will guarantee the control and application of rules.”

SPANISH AGENCY FOR FOOD SECURITY AND NUTRITION (AESAN)

The mission of food security has been to adapt food products and its processes of elaboration to a frame of reference demanding with the protection of citizens' health previously established on the best evidence Scientific research. Decisions on food security should be based on the risk analysis, which should be adjusted to a structured method comprising the three distinct components, but closely linked risk analysis (Evaluation, management and communication).

A certain degree of maturity has already been achieved in the Spanish and European food from the point of view of food security, in fact, more than 10 years since the creation of the European Food Safety Authority (EFSA), through Regulation 178/2002, where they also established a series of basic requirements, such as the National Agencies.

Through Law 11/2001, of July 5, AESAN was created, with the general objective of promote food security, as a fundamental aspect of public health, and to provide guarantees and objective information to consumers and economic agents of the Spanish agro-food sector, from the scope of the powers of the



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

General State Administration and with the cooperation of the other public Administrations and interested sectors, subsequently, through Law 44/2006, issues related to the field of nutrition were incorporated.

Their objective is that the Observatory, in close collaboration with experts, other administrations, the business sector, consumers and users, is to constitute a broad dynamic system capable of offering, producing, agglutinating and collecting data, and evidence on nutrition, physical activity, overweight and obesity and its determinants, and serve as a meeting point between all public and private actors that converge in the objectives of the NAOS Strategy.^{5 ii}

2) Governmental guidelines and national recommendations

The **CONSENSUS DOCUMENT ON FOOD IN EDUCATIONAL CENTRES**⁶ was approved by the Spanish Health System's Inter-Territorial Board on the 21 July 2010 and is for use in any kind of educational centre where food is supplied to the pupil body.

Prior to its approval it was revised by the following bodies:

Scientific societies that are part of the Spanish Federation of Nutrition, Food and Diet Societies (FESNAD):

The Association for Graduates in Nutrition and Dietary Nursing (ADENYD); Spanish Association of Dieticians and Nutritionists (AEDN); Spanish Association of Doctors and Graduates in Food Science and Technology (ALCYTA); Spanish Society of Dietary and Food Science (SEDCA); Spanish Society of Endocrinology and Nutrition (SEEN); Spanish Society for Gastroenterology, Hepatology and Paediatric Nutrition (SEGHNP); Spanish Society of Nutrition (SEN); Spanish Society of Basic and Applied Nutrition (SENBA); Spanish Society of Community Nutrition (SENC); Spanish Society of Parenteral and Enteral Nutrition (SENPE); Spanish Society for the Study of Obesity (SEEDO).

The Spanish Nutrition Foundation (FEN); The parents associations CEAPA & COFAPA; The Spanish Federation of Social Caterers (FEADRS); The Spanish Association of Persons with Food and Latex Allergies (AEPNAA); The Spanish Federation of Celiac Associations (FACE).

The justification and legal framework for this document is the transcript below:

"The current and future health and wellbeing of the school-age population is profoundly conditioned by the type of food that they eat and by maintaining a healthy weight. According to the World Health Organisation (WHO) in their Global School Health Initiative, the educational centre is a key place where children can gain theoretical and practical knowledge about health and nutrition due to the amount of time they spend there. Moreover, it can be one of the main pillars in the prevention of obesity, helping bring about a change

⁵ Libro Blanco de la Nutrición en España Fundación Española de la Nutrición (FEN), 2013, ISBN: 978-84-938865-2-3

Depósito Legal: M-7773-2013 Imprime: Lesinguer, S.L.

Available at: http://www.seedo.es/images/site/documentacionConsenso/Libro_Blanco_Nutricion_Esp-2013.pdf

⁶ Available at:

http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/Nuevo_Codigo_PAOS_2012_ingles.pdf





Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

in unsuitable eating habits that are becoming entrenched in today's society.⁷ As well as being an important factor for parents to consider when choosing where to enrol their child, school meal times play a significant social and formative role as it is an integral part of the life and organisation of an educational centre, so much so that its planning, development, and assessment are part of overall yearly planning.

Article 2 of the Organic Law of Education 2/2006 dated 3 May, states that establishing a healthy lifestyle and taking part in physical exercise and sport must be set as a goal for the Spanish educational system to aim towards. Article 80.1 establishes that, when working towards exercising equal rights to education, public administrative bodies should develop alternative options for deprived individuals, groups and geographical locations and provide the financial resources and support for them. Article 82 refers to equal opportunities for rural communities where it specifies that the child population in these types of areas could be enrolled for basic education in a town near to where they live so as to guarantee quality of teaching. The educational bodies in these cases would also provide free school transport services, and where required, a dining hall and boarding school services.

The legal framework that regulates the school dining hall service is set out in the Spanish Ministry for Education and Science's Order dated 24 November 1992 (Official State Bulletin BOE 8/12/92), under which school dining halls are regulated. This document was partially modified by the Order dated 30 September 1993 (Official State Bulletin BOE 12/10/93). There are also regional regulations which control this service, and deal with management and organisational matters. This regulation covers a wide variety of subjects and it provides a detailed description of hygiene and health aspects, and the way that they are managed, organised and implemented. However, it is important to incorporate recommendations regarding nutritional aspects which encourage healthy eating habits and which pupils can take with them through life. Educational aspects which can help to develop healthy habits together with the family should also be taken into consideration.^{8,9}

The plenary session of the Inter-territorial Council of the Spanish National Health System met on the 29 June 2005 and agreed a series of recommendations for authorities and institutions involved in managing, organising and implementing school dining halls, with the aim of offering nutritionally balanced diets.¹⁰ Following this, on 16 December 2008, during the General Education Council, the Ministry for Education agreed to sign up to this initiative. This consensus document aims to develop these proposals by incorporating nutritional recommendations for school meals that include recommended nutritional daily intake values, by providing information for families, tending to special requirements and by developing criteria for offering healthy options in vending machines, canteens and kiosks in educational facilities."

This document sets out four main objectives of a school dining hall, they are: Health, hygiene and diet; Responsibility; Free time; Coexistence.

⁷ Food and nutrition policy for schools. A tool for the development of school nutrition programmes in the European Region. Programme for Nutrition and Food Security WHO Regional Office for Europe. Copenhagen 2006.

⁸ Aranceta J, Pérez Rodrigo C, Dalmau J et al. El comedor escolar: situación actual y guía de recomendaciones. *Anales Españoles de Pediatría*, 2008; 69 (1): 72-88.

⁹ Martínez JR, Polanco I. *El libro blanco de la alimentación escolar*. Ed. Mc Graw-Hill (Madrid), 2007.

¹⁰ Consejo Interterritorial. Sistema Nacional de Salud (CISNS). Propuesta de acuerdo sobre el servicio de comidas en centros docentes (comedores escolares). Anexo I al Acta 70. Pleno CISNS- 29/06/05.





Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

Also, refer to the Nutritional conditions for planning school meals, where is stated that the lunchtime meal should provide a third of the daily energy required, the quantity depending on the age group, as can be seen in the following table (table 1):

Table 1. Recommended daily energy intake and the proportion of energy that a lunchtime meal should provide, across the different age groups of the school population (Food and Nutrition Board. Institute of Medicine of the National Academies, 2005).¹¹

POPULATION	AGE	ENERGY	35% ENERGY
	years	kcal/day	kcal/day
Boys	3-8	1742	610
Girls	3-8	1642	575
Boys	9-13	2279	798
Girls	9-13	2071	725
Boys	14-18	3152	1103
Girls	14-18	2368	829

Within the Organisation of dining hall services are four points: 1 - Proportion of space per pupil/diner (*established in the opening licence Document*); 2 - Duration of mealtimes (*no less than thirty minutes*); 3 - Regulation of school meals (*regulated by health professionals¹² with accredited training in human and dietary nutrition*) and 4 - Qualifications and training of the lunchtime supervisory staff.

Appropriate measures should be taken in the event of Pupils with special dietary requirements.

Educational centres should provide the families, tutors and lunchtime staff, with a monthly meal plan, which includes meals for special dietary requirements.

Concerning Inspection and Follow-up, health authorities of each region are to ensure that all the nutritional criteria outlined in this document are adhered to with regard to the variety and food intake frequency

¹¹ Dietary reference intakes for energy, carbohydrate, fibre, fat fatty acids, cholesterol, protein and amino acids. Food and Nutrition Board. Institute of Medicine of the National Academies; The National Academies Press; Washington, D. C.; 2005.

¹² LEY 44/2003, de 21 de noviembre, de ordenación de las profesiones sanitarias. (BOE No. 280 dated 22/11/2003).

Available at: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2003-21340



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

provided by school meal plans, and with regard to the foods on offer in vending machines, canteens and kiosks in educational centres.

The food on offer in vending machines, canteens, kiosks or similar facilities within educational centres must comply with the nutritional recommendations for the school-age population.

Table 2. Nutritional criteria for food and drink

Energy or nutrient	Content per portion	Content per 100 g*	Content per 100 ml*
Energy	≤200 kilocalories	≤400 kilocalories	≤100 kilocalories
Total Fat	≤7.8 g	≤15.6 g	≤3.9 g
Saturated fats	≤2.2 g	≤4.4 g	≤1.1 g
Trans fatty acids	≤0.5 g	≤1 g	≤0.25 g
Sugars	≤15 g	≤30 g	≤7.5 g
Salt/sodium	≤0.5 g salt/200 mg sodium	≤1 g salt/400 mg sodium	≤0.25 g/100 mg sodium

* A packet or portion is 50 g for solid foods and 200 ml for drinks, which are the most common measurements used on the market.

Lastly, this document contemplates three annexes at the end: Annex I - RECOMMENDED FREQUENCIES OF DIFFERENT FOOD GROUPS, and a description of different food groups and other considerations; Annex II - APPROXIMATE PORTION SIZES¹³; and Annex III - JUSTIFYING USE OF VENDING MACHINES, CANTEENS AND KIOSKS IN EDUCATIONAL CENTRES.

3) Statistics (related to problematic areas)

The **Guide for a school Active and healthy - Orientations for the Centers of Primary Education**, published in 2008, underlines:

“Child Obesity: A problem of great dimensions

Data on childhood obesity show a rapid increase in multiple countries. In Europe, it is estimated that, each year, 400,000 new boys and girls become obese. In Spain, the *enKid* study shows that 4 out of 10 schoolchildren aged 6 to 10 years are overweight, of which 1 is obese. In adolescents the data are equally worrisome and show that 1 in 3 adolescents are overweight and 1 in 20 is obese. And even more worrying is the fact that the annual growth of childhood obesity seems to accelerate year after year, placing Spain among the leading countries in Europe. These data provide a very alarming expectation about the increase

¹³ Russolillo G, Marques I. Sistema de Intercambios para la Confección de Dietas y Planificación de Menús (2010). Available at: www.intercambiodealimentos.com. (Last accessed 12/05/2010).



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

in the number of adult obese people in the future, and therefore, on the increase of those diseases that are linked to obesity.”^{14 iii}

On the same Guide, data on the performance of regular physical activity show that only 30% of spanish children with age between 5 and 15 years-old do intense exercise (ENS 2003), and only 32,2% of boys and 17,8% of girls, with age between 6 and 9 years-old do sport (enKid 2000).

In the **Annual Report on the National Health System of Spain 2015** we can read the following:

Obesity and overweight

With regard to body weight, 53.7% of the population aged 18 and over are obese or overweight. The percentage is 27.8% in the case of children aged 2 to 17. Among adults, the frequency of obesity increases as the level of education decreases: it affects 26.7% of the population that has completed primary school or less, as compared to 9.8% of the population with a university education. A majority of the employed population (64.0%) state that no activities promoting a healthy diet take place where they work.”¹⁵

Graphic 1. % Overweight and Obesity by age & educational attainment in females in Spain 2014¹⁶

¹⁴ © MINISTERIO DE SANIDAD Y CONSUMO Agencia Española de Seguridad Alimentaria y Nutrición Subdirección General de Coordinación Científica. N.I.P.O.: 355-08-008-5 I.S.B.N.: 978-84-691-3646-1 DEPÓSITO LEGAL: M-35173-2008 Available at:

http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/educanaos/profesores_escuela_activa.pdf

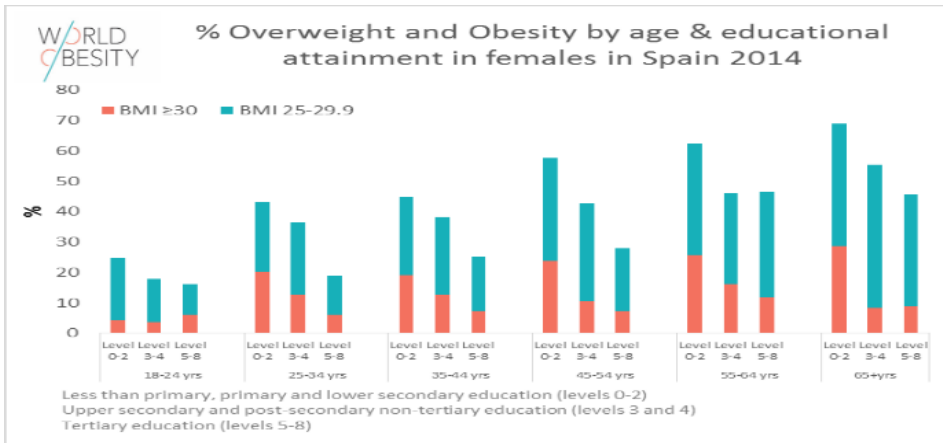
¹⁵ REPORTS, STUDIES AND RESEARCH 2015, MINISTRY OF HEALTH, SOCIAL SERVICES AND EQUALITY

https://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/tablasEstadisticas/Resum_Inf_An_SNS_2015_ENG.pdf

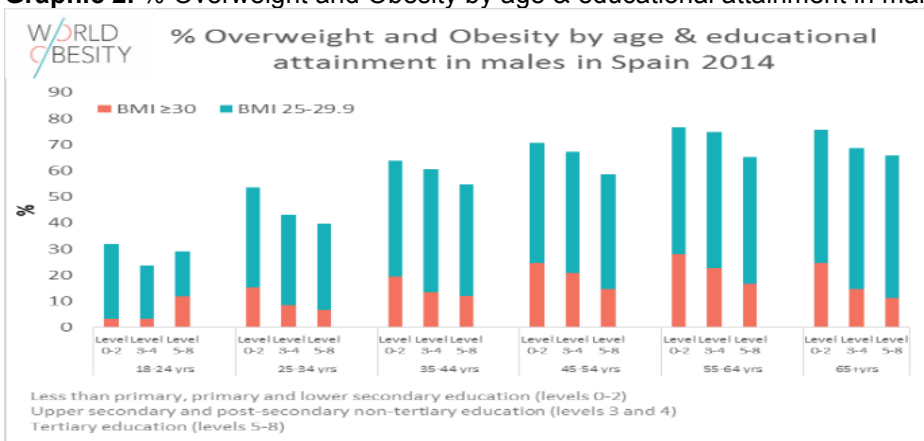
¹⁶ Available at: http://www.worldobesity.org/site_media/uploads/Country_report_Spain_Nov_2016_v4.pdf



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196



Graphic 2. % Overweight and Obesity by age & educational attainment in males in Spain 2014¹⁷



¹⁷ Available at: http://www.worldobesity.org/site_media/uploads/Country_report_Spain_Nov_2016_v4.pdf

Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

2 How is child nutrition organized at national level in kindergartens and schools (ref. to children 4 to 10 years old)

2.1 General description of the situation

Child nutrition at national level in kindergartens and schools of Spain are regulated, mainly, by the CONSENSUS DOCUMENT ON FOOD IN EDUCATIONAL CENTRES, previously described.

Other national, regional and local legislation, concerning consumption for example, should also be applied.

2.2 Which is the process to approve the food sold in the school

The conditions of school and kindergarten nutrition are defined and controlled by the national and local governments.

They should attend to all the general and specific regulations concerning food safety, health, etc. described in this document and/or others in practice in Spain.

As an example we describe here the process in Valencia stated in his own regional legislation.^{18 iv}

The *Conselleria de Educaci3n* of Valencia by the *ORDEN 47/2010, de 28 de mayo (2010/6362)* regulates the school dining service in non-university educational centers owned by the *Generalitat*, entry into force: 08.06.2010.

The tendering companies that meet the requirements will be approved for the provision of school dining service. Under the Public Sector Contracts Law, the corresponding tenders processed by open procedure, in each of the provinces of Alicante, Castell3n and Valencia

In its article 3 it is stated that are two the school canteen service will be provided through the management of the educational center itself through one of the following types of service contracting:

- a) Recruitment of the catering service through the supply and preparation of meals in the educational center, by an approved company of the corresponding framework agreement;
- b) Recruitment of the catering service by supplying meals made in central kitchens and transported to the educational center, by an approved company of the corresponding framework agreement.

Within his article 4, determines that each framework agreement will be processed and resolved by the corresponding territorial direction, which is the contracting authority for school canteens, according to the current legislation on delegation of powers.

Also, the tendering companies that, after applying the valuation criteria established in the bidding documents of the corresponding framework agreement, comply with the requirements, shall be approved for the provision of school dining services (...)

¹⁸ *Diari Oficial n3m. 6283 de 07.06.2010) Ref. Base Datos 006438/2010*

Available at: http://www.dogv.gva.es/m/portal/ficha_disposicion.jsp?id=26&sig=006438/2010&L=1&url_lista=

Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

In other hand, the administrative authorization to open and operate needs a favorable Act of the Health Inspection, as we can read in the Article 7.

Within the Article 15 (Obligations of companies) is established that as of the second course of application of the framework agreement, the company must prove that it is duly registered and has the corresponding sanitary and business authorizations, as well as justify that it has the corresponding liability insurance, (...) with regard to the possible risks of ingestion of food in poor condition and by the actions of the personnel who render their services in the school canteen and directly or indirectly manipulate food (...)

The companies will be obliged to comply with the current legislation on collective canteens, sanitary measures and all those of labor, social and derived from the collective agreement of application.

Failure to comply with any of the above obligations may lead to termination of the contract.

(...)

All the staff attached to the dining service, both in the kitchen and in the care of the dependent students of the contractor company must be in possession of the certificate of food handler.

Those centers that have school canteens in operation duly authorized, will maintain their authorization as long as they do not change the conditions that motivated the same.

Concerning the supervision of school canteens (Article 17) the territorial authorities responsible for education, in their respective management area, shall take the necessary measures for the dissemination and application of this order.

Finally, without prejudice to the supervision that labor and health matters correspond to other instances, the Inspection of Education will supervise the operation of school canteens, ensuring compliance with this order and other educational regulations in force in this area.

2.3 Regulatory requirements related to the food sold, consumed or served in the school

*“Article 40.7 of Law 17/2011, of 5 July, on food safety and nutrition, states: **Kindergartens and schools are protected publicity-free zones. Campaigns for the promotion of diet, nutritional education or the promotion of sport or physical activity in schools and the sponsorship of teams and sports events in the academic environment shall be previously authorised by the competent educational authorities, in accordance with the criteria established by the health authorities with the objective of fostering healthy exercise and nutritional habits and preventing obesity.***

In the context of the technical Working group with the Regional Communities, created under the framework of the NAOS Strategy in January 2008, at the meeting held on 17 October 2013, it was agreed to develop article 40.7 of the Food Safety and Nutrition Law, and consequently, to develop the Agreement in certain “Harmonised criteria agreed by all the Regional Communities, without prejudice to their authorities in terms of Health”.

The NAOS Strategy, the initials of which stand for Nutrition, Physical Activity and Prevention of Obesity, is the response from the Ministry of Health, Social Services and Equality from the Government of Spain to the problem of obesity. Coordinated by the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN), the NAOS Strategy aims to make the population aware of the problem that obesity represents for health, to promote health through healthy eating habits and physical exercise, and to bring together





Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

and promote those public or private initiatives that help to ensure that the public, in particular children and adolescents, adopt these healthy eating habits throughout their life.”¹⁹

“To favour improvements in school food, an agreement has been drawn up with leading businesses from the catering industry, belonging to the Spanish Federation of Associations Given to Social Catering (FEADRS). These businesses undertake to:

- Not use oils rich in saturated fats (palm oil, saw palmetto and coconut) or transfatty acids when frying, replacing these oils with other healthier oils.
- Use iodized salt in those areas known to have an iodine deficiency, as indicated by the Health Authorities.
- Carry out children’s workshops to foster the educational measures aimed at the promotion of a varied and balanced diet.”²⁰

Considering again the example of the legislature of the Valencia community on school canteens, above referred, in its Article 16 (Security and hygiene normative) it is stated that the school canteens must comply with the requirements established in the European, state and autonomous regulations in force in hygiene, health and food.

Moreover, for hygienic-sanitary and food safety reasons, the consumption of food that has not been supplied by the contractor will not be allowed.

Even though, according to the current regulations, the consumption of alcoholic beverages and tobacco is prohibited in schools and, therefore, in the facilities where the school dining service is provided.

¹⁹ Criteria for authorising campaigns for food promotion, nutritional education or the promotion of sport or physical activity in kindergartens and schools, with the aim of fostering healthy eating habits, encouraging physical activity and preventing obesity. Edited by: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Affairs, Food Safety and Nutrition, 2015 NIPO: 690-15-004-9
http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/educanaos/English_DOCCRITERIO.pdf

²⁰ Spanish strategy for nutrition, physical activity and prevention of obesity, The NAOS Strategy, (pag. 28) Ministerio de sanidade y consumo - Agencia española de seguridad alimentaria.
http://www.aecosan.msssi.gob.es/AECOSAN/docs/documentos/nutricion/NAOS_Strategy.pdf



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

2.4 Issues identified

Please, describe identified issues on a local, regional or national basis, which create problems before the providers of food for the children and the meeting of all regulations and requirements. The issues mentioned below can be replaced by other nationally-relevant content if needed:

Issue 1. Discrepancies between available products and the set requirements for the menus and buffet food (not compulsory)

Issue 2. Existing information on the organization of connections with producers (not compulsory)

Issue 3. Attitudes towards the use of foreign (exotic) foods (not compulsory)

3 Good practices

As Spanish provinces and municipalities are entities that enjoy autonomy for the management of their respective interests, there are different measures of each one on fostering health-friendly nutrition attitudes among the youngest.

We name some of them as an example, however they should mirror the orientations and laws emanating at the level of the central government.

The *Conselleria* of Health, through Public Health, will examine the quality of menus in school canteens, with the aim of ensuring the nutritional quality of the food served to children.

The project to be implemented is called the Program for the Evaluation and Promotion of the Nutritional Quality of the Food Supply in Schools 2016-19, and whose main purpose is to guarantee the quality of the food supply of schools in the Region of **Valencia**. This program will involve professionals with training in nutrition and dietetics, inspectors on the official control of school canteens, as well as trained personnel to handle information related to the supply of food and beverages. In addition, it will designate central service personnel such as Public Health Centers (CSP), for the evaluation of the food supply of the menus of a school month.²¹

Among the good practices observed in some of the schools participating in the Health EDU project are the following:

1. Food and menus:

- Most schools offer menus that are suitably adapted for students that suffer food allergies and intolerances.

²¹ <http://www.levante-emv.com/comunitat-valenciana/2016/10/04/salud-publica-revisara-menuescolares/1474983.html>

Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

- Some schools offer vegetarian menus as well as menus that take cultural diversity into account .
- Early Childhood Centres offer three types of menus that are adapted to the development of children's food intake: finely ground baby food that allows the progressive introduction of new food elements (up to around 9 months of age or the age at which all food types have been introduced), coarsely mashed baby food containing a variety of food elements, and whole unmashed foods.
- All the centres offer varied and balanced diets in their menus and include the presence of fruits and vegetables. Fruit is available in all the centres as a lunchtime dessert and in the afternoon snack. In some cases unlimited fruit is available for the morning and afternoon snacks.
- In some schools the morning and afternoon snacks are provided by the centre itself which guarantees that children will eat a healthy sandwich and fruit.
- In some centres salad vegetables are offered in a buffet so that students can prepare their salads to their own liking and take more as they like. The salads offer cheerful and diverse ingredients (tomato, cucumber, lettuce, corn, apple, tangerine, cheese ...)
- In a few schools ecologically grown vegetables are available with certain dishes along with seasonal fruits, especially oranges and mandarins. Vegetable purees such as pumpkin may also be available.
- Olive oil is used for cooking and for salad dressing in the majority of schools.
- In some schools oven-cooked dishes are provided in place of fried foods and chickpea flour is used for battering.
- The majority of schools avoid fried and precooked meals.

2. School kitchens:

- All the schools visited have their own kitchen and in some the kitchen staff are members of the school personnel.

3. Professionals:

- In all cases the schools' menus are prepared by a paediatrician or a nutritionist and are reviewed periodically, usually once a year. The head of the kitchen participates in the preparation of the menus, as does the head of studies in some centres.
- The monthly menu is sent to parents, and in the case of infant schools parents are informed of how their child has eaten every day.

4. Food providers.

- Schools are supplied by local supermarkets and fresh produce is obtained in local shops and markets.
- The supply of organically grown products is provided by local associations.

5. Initiatives to promote healthy habits.

5.1. Sweets, juices and bakery products in lunches and snacks:





Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

- Children are encouraged to bring fruit for the morning break.
- Children are encouraged not to bring sweets, juices and industrial pastries, and in some cases products these are prohibited.
- Thanks to the Health EDU project, the 1st year primary class of one school has implemented an initiative in which each student brings a specific snack for the morning break on each day of the week (a sandwich, fruit, dairy product or dried fruits) so that everyone in the class has the same morning snack.
- On one day a week the association of mothers and fathers prepares snacks that can be bought for a symbolic price.
- Some infant schools have established a specific 'fruit day' for the morning break.

5.2. The school garden:

- Vegetables and greens from the school garden are brought into the classroom and tasted. When children themselves grow vegetables and fruits they are often motivated to try them and to like them.

5.3. Seasonal celebrations:

- Some centres perform tastings of typical seasonal foods such as oranges and pumpkin in the winter, chestnuts on Chestnut Day, and eggs at Easter.
- In general these celebrations take into account the ingredients available in each locality in typical and traditional foods such as pumpkin fritters, Spanish sponge cake etc

5.4. Classes on healthy nutrition, talks, workshops and other events:

- Some centres organise workshops on flavours, cooking, healthy foods (pizza, fruit skewers ...).
- Classes that mainly focus on the relationship between health and food.
- In some centres parents are offered talks on alimentation.
- Organisation of outings to the municipal market and the purchase of fruit to carry out fruit workshops.
- Participation in events such as the women's race organized by the Town Hall of Albal (March 2016).
- Collaboration with organisations such as the Association Against Cancer to raise funds.
- Making carnival costumes based on food themes.
- Building a Falla on a food-related theme.

5. 5. Personal hygiene and sports habits:

- The centres strongly encourage the habit of handwashing before snacks and meals.
- Some schools, especially infant schools, strongly encourage teeth brushing in the school itself.
- In some schools massage and relaxation are performed in the time between the meal and the return to the classroom.
- Physical education teachers request that children bring toiletries and towels from home, and in the higher years of primary education shirts are changed after the class. In addition, they encourage the practice of different sports that can later be played during break times.



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

5.6. Water consumption:

- In some centres, especially infant schools, water is offered to pupils on various occasions during the school day.

5.7. The food-related environment:

- In some schools particular attention is paid to all aspects of the mealtime environment (noise levels, table linen, the arrangement of objects on the table).
- Some centres propose that children share the food brought from home during the morning and afternoon breaks, especially in the case of fruits.

4. Identified problems at national levels/initiatives that should be implemented (i.e. non-formal education initiatives) and conclusions

1. Limitations:

- Introduce children to some foods that they are not accustomed to consume at home (greens, vegetables, fish and even some fruits).
- The sense of taste of those students who reject greens, vegetables, fruits or fish and refuse to try them, and who at the same time want more dairy products, meats and processed foods.
- Family diversity and the poor level of collaboration on occasions.
- It can often be difficult to encourage the habit of eating fruits and vegetables in students because in some cases this produce may not look attractive to them.

2. Improvement proposals:

- Fruit should be readily available at mealtimes so that students can access it whenever they like. If families are responsible for including fruit for the morning and afternoon snacks it is more difficult to ensure that children consume fruit daily. If some children stop bringing fruit, the others are discouraged.
- Schools should have osmotic water purifiers available so that the taste of the water is more pleasant for the students.
- The legal regulations that prohibit taking home-made foods to school that are not labelled with their ingredients.



Innovative teaching methodology of health friendly nutrition development and practice in pre-primary and primary education (HealthEDU) Project ref. No.:2016-1-LT01-KA201-023196

- Schools want to promote family sports activities such as pilates, yoga and fitness that are performed jointly by the father or mother with their daughter or son.

- Undertake more informative talks given by a nutritionist or pediatrician to families about healthy eating and offer healthy food alternatives for school age children. Inform families about infant food products that contain non-recommendable ingredients such as palm oil.

ⁱ Free translation

ⁱⁱ Free translation

ⁱⁱⁱ Free translation

^{iv} Free translation

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